

11/5/02

cf Q1204, Stanford. 196x

Bibliographic and commonplace notes 1960's (Stanford)

Pirie, N.W. 1937 The meaninglessness of the terms life and living.
In Perspectives in Biochemistry (31 essays presented to Sir F. G.
Hopkins, edited by Joseph Needham and David E. Green).
Cambridge, University Press, pp 361. p.11-22

Genipin

Stout, David B.: Book review of Keeler: Apples of Immortality from
the Cuna Tree of Life. Science 134, 278 (1961).

Letter of defense by Keeler. Science 135, 593 (1962).
see also J. Jer. 53: 92 1962

Ward, B.W., 1955. Plea for the extension of biological abstractions.
Science 122: 1016-1017.

Butcher, S.H. 1904

Harvard Lectures on Greek Subjects
Phoenicians - invent fabulous horrors to protect navigational ~~sens~~ ^{rits}
p.47

cf p 87

Kennan, G.F.

Daedalus, 1958n Quoted in Science, May 6 '60 p1359
"thought is by its very nature an individual process, not a
collective ne; to be useful thought must be communicated; to
be communicated it must be put through the filter of the single
mind that puts it into words; it cannot therefore be greater than
what a single mind can comprehend and state"
cf also Whitehead re Discovery and Invention

Campbell, Allan, 1960. Autocatalytic particles and steady states.
Nature, 186: 256. April 16.

Westbrook, J.H., 1960. Identifying significant research.
Science 132: 1229-1235.

Literature citation counting is evaluated as a means for
identification of significant research.

Jacobson, H. 1955 Information theory and life. Am Sci 43: 119-127.
Biopoiesis
200 bit estimate How?

Szybalski, W. 1955 "Lamarckian" /streptomycin resistance. Antibiotics
Annual 54-55 174-177.
rudimentary data

Blum, H.F. 1951 Time's arrow and evolution. Princeton University Press, Princeton, NJ pp 222.

v. p. 142 The complex hereditary mechanism involving nucleus, chromosome, and gene seems a very special one -- perhaps only arrived at after a considerable period of evolution. It seems hardly the sort of thing to be expected in the most primitive living systems. Among the bacteria, for example, self-reproducing desoxyribonucleic acid-containing structures have been demonstrated, but it is not established that these have elaborate gene and chromosome arrangements comparable to those found in higher forms.

also p. 177 - cyanophytes - bacteria have no chromosomes

"...I am well aware that repeatedly it is stated that some sort of sexuality has been found among bacteria. But why anyone should look for sex in organisms which do not possess nuclei I do not know...."
-- from The Evolution of Living Things, 1958. H. Graham Cannon, Univ. of Manchester.

Salser, Winston, 1961. Non-genetic biological information. Perspect. Biol. & Med. 4: 177-198.

Schopfer, W.H. 1943. Plants and Vitamins. Chronica Botanica Cp., Waltham Mass pp 293 00

Miles, AA 1955. The meaning of pathogenicity in Mechanisms of microbiol pathogenicity. 5th Symp S.G.M. Cambridge pp 1-16.

Kluyver, AJ 1953. The changing appraisal of the microbe. Proc Roy Soc B141: 147-161. Leeuwenhoek

Hunt, GA, A. Gourevitch, and J. Lein, 1958. Preservation of cultures by drying on porcelain beads. J Bact 76(4): 453-454.

See also: McQuillan p.252 in "Bacteria" Vol I (Gunsalus & Stanier)

Dubos - Bacterial Cell p.32

Weibull - copy enclosed.

re: plasmolysis

Mager, J., Miriam Kuczynski, Gisela Schatzberg and Y. Avi-Dor, 1956.

Turbidity Changes in bacterial suspensions in relation to osmotic pressure. J. Gen. Microbiology, 14(1) 69-75.

Moondust - editorial

New Eng J Med 2 Oct 1958
John Lear

"Lunik II Impact May Have Contaminated the Moon". Missiles and Rockets 5: 41, December 21, 1959.

Origin of Life -
some sort of energy mobilization
(photosynthesis?) O₂ would absorb uv. Was there O₂?

ATP early involved. Focus problem on the first protein....

The basis for evolution by natural selection should have been hid as soon as there was the possibility of persistent reproducible variations in pattern and this could have been possible only after the advent of large complex molecules such as the proteins.
p. 178

In re transformation
do I cite? not in C-sci 1/82

S.J.C. Dunlop 1938
microfilm

rec'd 1956

in re transformation
Acta Leidensia [Inst. trop. geneesk.]
12-13: 132-140 1937-38

USDA library ?how found

Finland, M 1955. Some observations on changing patterns of resistance of certain common pathogenic bacteria to anti microbial agents. Antibiotics Annual 1954-55 Med Encycl., 1955

shows species spectrums
should write.

Hausmann, W. 1907. Die Genohnune an Gifte. _____ Physiol 6: 58-104

[adaptation topoisomes Review]

Boring, J.R. and D. Pratt, 1961. Spheroplasts of marine bacteria induced by the action of Penicillin. *Nature* 192: 773-774.

stable in sea water
therefore marine organisms do not have rigid wall

refs to internal osmotic p_____

Hess, E.L. and Saima E. Lagg, 1958. Some physical aspects of the bacterial cell. *Science*, 128: 356-358. Aug. 15.

re plasmolysis

Ruffilli, Domenico 1933. Untersuchungen uber das spezifische Gewicht von Bakterien. *Biochem. Ztschr.* 263: 63-74.

E. coli 88d=1.094
Weighed pellets

specific gravity

subtilis 1.105 cocci 1.129
spores 1.115

The Centre National de la Recherche Scientifique, Paris, is offering a prize of 10,000 N.F. for the best solution, received before October 1, to the problem of documenting the enormous amount of scientific material at present being published. Further information can be obtained from the Centre National de la Recherche Scientifique, 15 Quai Anatole France, Paris 7e.

Nature 193: 426(Feb 3, 1962)

Ducoff & Ehret Mitogenesis: colchicine

"Interestingly enough, there is a difference in reaction time to colchicine for different nuclear class series of the sort obtained in organ suspension injections of the orbital gland. The smaller nucleoplasm reacts sooner to colchicine, and the larger nucleoplasm reacts later."

Firket: "Concerning the effect of colchicine on cell division,

it is perhaps not very widely known that the characteristic action of colchicine on the spindle is found only in mitoses occurring after blastulation.

"Before that, during early cleavage, colchicine has practically no effect on the spindle. Metaphases are not lengthened and are followed by a normal anaphase. Colchicine does penetrate the cells, however, because some chromosome breakages and other abnormalities occur. This kind of reaction has been studied by several independent groups in Europe" (Gropp, 1951; Sentein, 1951).

Gropp, A., 1951. Ztschr mikr. -anat. Forsch., 56: 479
Influence of colchicine on mitosis of Trit ____ p_____
No specific c-mitosis during early cleavage (a-centriolar stage)

Sentein, B., 1951. Arch. Anat. Histol. & Embryol., 34: 377.
colchicine no specific c-mitosis at early cleavage.